DOCUMENT RESUME

ED 425 008 PS 027 194

AUTHOR Simon, Mary Ellen
TITLE NeighborhoodLink: A Community Network for Cleveland's Inner City.
PUB DATE 1998-12-00
NOTE 10p.; In: Proceedings of the Families, Technology, and Education Conference (Chicago, IL, October 30-November 1, 1997); see PS 027 175.
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Access to Information; *Community Programs; *Computer Networks; Computer Uses in Education; Educational Technology; Information Networks; Information Technology; *Internet; *Low Income Groups; *Online Systems; Urban Areas

ABSTRACT

This paper suggests that the Internet has great potential for educating and informing those who use it--but only if they have access to educational content that informs them in a way that meets their needs. Many community-based groups, nonprofit agencies, and institutions have volunteered to give all children and families, especially those who cannot afford it, access to the best of the Internet with content that is important, accurate, and appropriate for their needs. NeighborhoodLink is one such community network that focuses on the needs of low-income people. Because this focus is somewhat different from most community networks, the content it provides reflects that difference. The study described in this paper is a search for NeighborhoodLink's special identity as an urban community network. To improve the content of NeighborhoodLink for low-income families and children, the study looked at similarities and differences in over 20 models. LibertyNet and Charlotte's Web proved to be the two most appropriate models, providing NeighborhoodLink with ideas for local information that can be adapted and replicated, but several other models also provided information and potential links. An unexpected benefit of the study was the recognition of the accomplishments of NeighborhoodLink that are exceptional. Although all community networks require much of the same basic information and services, each network needs to find its own niche to provide relevant and important content in an organizational structure that works. (A list of the model networks examined in the study is appended.) (LPP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 425 008

NeighborhoodLink:
A Community Network for Cleveland's Inner City

Mary Ellen Simon[1] ■

Abstract

The Internet has great potential for educating and informing those who use it—but only if they have access to educational content that informs them in a way that meets their needs. Just as public libraries provide access to information for all citizens, the ramps to the information superhighway must be open to all, not just those who can afford it. Many community-based groups, nonprofit agencies, and institutions have volunteered to give all children and families, especially those who cannot afford it, access to the best of the Internet with content that is important, accurate, and appropriate for their needs. NeighborhoodLink is a community network that focuses on the needs of low-income people. Because this focus is somewhat different from most community networks, the content it provides reflects that difference. The study described in this paper is a search for NeighborhoodLink's special identity as an urban community network. To improve the content of NeighborhoodLink for low-income families and children, the study looked at similarities and differences in over 20 models. LibertyNet and Charlotte's Web proved to be the two most appropriate models, providing NeighborhoodLink with ideas for local information that can be adapted and replicated, but several other models also provided information and potential links. An unexpected benefit of the study was the recognition of the accomplishments of NeighborhoodLink that are exceptional. Although all community networks require much of the same basic information and services, each network needs to find its own niche to provide relevant and important content in an organizational structure that works.

■

Introduction

The Internet has great potential for educating and informing those who use it—but only if they have access to educational content that informs them in a way that meets their needs. Just as public libraries provide access to information for all citizens, the ramps to the information superhighway must be open to all, not just those who can afford it. Many community-based groups, nonprofit agencies, and institutions have volunteered to give all children and families, especially those who cannot afford it, access to the best of the Internet with content that is important, accurate, and appropriate for their needs.

The study *America's Children and the Information Superhighway: An Update* (Children's Partnership, 1996), aware of the impact that the newest technologies have on young people's ability to "compete effectively in the changing job market," is especially concerned with "poor children at risk." The study reports on the widening "gap between the information technology haves and have-nots" (Children's Partnership, 1996, p. 3):

- 82% of high school students from the most affluent homes have access to computers at home, compared to 14% of poorer high school students.
- 31% of schools with a large proportion of students from poor families have access to the Internet, compared to 62% of schools with higher income students.

The Morino Institute, a Washington-based foundation and institute committed "to assist(ing) organizations and individuals in the use of information and

[1] Mary Ellen Simon was unable to present this paper at the conference because of illness.

FL 025194

electronic communications to work for positive social change" (Morino, 1997a), has published several electronic articles (see http://www.morino.org) dealing with the importance of access to advanced technology for all people. Mario Morino, founder of the institute, writes that "If properly harnessed and structured in a supportive, collaborative, human context, this technology can be a powerful and useful tool for changing people's lives" (Morino, 1997a).

The public has become aware of the need for parents, children, and teachers to become competent in using the newest computer technology for educational purposes. What many people do not know is that "some of the most pioneering and promising applications of technology for young people and their families" can be found in local community networks around the country (Children's Partnership, 1996, p. 5). In fact, many of us do not have a clear idea of what a computer community network is.

In common usage, the term *community network* has been applied to any system that has community-related content or is directed at a local audience. Beamish (1995) suggests that multiple meanings for the word *community*—it might be a "physical place such as a town, city, or neighborhood," or "a social group . . . that shares common interests"—make it possible to attach many different meanings to the term *community network*. A history of community networking produced by Morino confirms that the term has a history of vagueness (see Morino, 1997b).

In some cities, community networks have grown or evolved from FreeNets or community bulletin boards, so much so that the name *FreeNet* became identified with community networks and is often mistakenly used as a generic term for community networks (Beamish, 1995). Kanfer and Kolar (1995) write that many early community networks began simply as "land claims in cyberspace." This lack of focus resulted in networks being developed in many different ways.

When the World Wide Web, one of the most popular applications of the Internet, was developed, community networks popped up quickly, with recent estimates showing a new Web page being created every four seconds. These networks grew with little planning, and content was often developed based on whatever data were on hand. Some networks simply provided services such as bulletin boards; some provided information from the library staff or nonprofit groups who were starting up or expanding the network.

NeighborhoodLink is one of the community networks that is among a "handful. . . focusing on the needs of low-income residents" (Children's Partnership, 1996, p. 5). As one of these few, NeighborhoodLink is somewhat different from most community networks, and the content it provides needs to reflect that difference.

This study is a search for NeighborhoodLink's special identity as a community network—an identity we hope to find by looking at similarities and differences in models that might be replicated. In documenting this search, I hope to be able to give those who volunteer on NeighborhoodLink committees a clearer sense of direction; and in explaining the challenges we face in our growth process, I hope to give helpful information to other community networks.

NeighborhoodLink

Background

In 1994, as part of a nationwide community network movement and using the model of the United Neighborhood Houses of New York, the NeighborhoodLink task force came together to create a community network specifically targeted at reaching and informing Cleveland's inner-city residents. NeighborhoodLink was designed to be both a community network on the Internet and a community project working in the city's community centers. Initiated by the Greater Cleveland Neighborhood Centers Association (NCA), a local nonprofit agency, with three other community partners—Cleveland State University (CSU), the City of Cleveland, and Ameritech—a collaboration was formed to bring the Internet to low-income people in Cleveland's inner city. In 1997, NeighborhoodLink is surviving its fourth year, with growing pains in a few areas—most noticeably in financial and volunteer support and content development. Financial and volunteer support are essential to NeighborhoodLink's continued operation and merit a complete analysis as the subject of another paper. However, because they have an impact on content development, some mention of these factors is warranted.

Financial Support. Seeking funding at start-up, the collaboration of NeighborhoodLink's partners had responded to a request for proposals from the U.S.

Department of Commerce's National Telecommunications and Information Administration (NTIA) with a plan for the NeighborhoodLink project. Funding is part of the Telecommunications and Information Infrastructure Assistance Program (TIIAP) of NTIA that "supports projects that increase access of the underserved such as inner-city and remote, rural minority populations to social services and information made available via information infrastructure" (U.S. Department of Commerce, 1996).

Although NeighborhoodLink's original request for funding from NTIA/TIIAP was not successful, funding from local foundations was obtained. Grants from the Gund Foundation, the Cleveland Foundation, and the Thomas H. White Foundation gave the project the dollars needed to begin. Now, as this financial support is running out, funding is again an ongoing concern.

Volunteer Support. Significant volunteer support at start-up had taken care of several program components: computers, wiring, and training. The first two items were technical considerations that Ameritech and the Greater Cleveland Neighborhood Centers Association (NCA) had agreed they would provide. Ameritech donated computers, hardware, and phone lines; the NCA supplied the space, the "family rooms," for computer use.

The third item, training, was supplied by NCA personnel, who trained the staff in use of the Internet at five neighborhood centers, two city recreation centers, and five partners' locations. The center staff, in turn, trained the end users—the neighborhood people who visit the community centers—and supported them in their efforts to become computer literate. Although much of the training took place during 1995, it remains a constant requirement as trained personnel leave center jobs and new untrained people replace them. Volunteers are relied on for many of the network's needs, and although many are willing to help, their time is limited.

Content Development

NeighborhoodLink content began with only a few pieces of original data and several links to national sites, admittedly not the best way to establish high-quality content. Development of content, whether it is original local information or linkages to already established Web sites, requires planning, extensive searching, and volunteer hours; and volunteers could not provide any of those.

Local information, other than simple address lists and directories, can be difficult to compile, and once the information is gathered, the HTML writers must be found to convert the text into the language of the Internet. NeighborhoodLink was able to call upon Cleveland State University student assistants to do most of the HTML conversion, as have other universities, which seems to be the most cost-effective solution to the problem ("Colleges Ponder Pros and Cons," 1997). Most community networks rely upon large numbers of volunteers, and some sites, such as Charlotte's Web, request volunteer participation on the pages of their Web site.

In NeighborhoodLink, it was decided that content development would be assigned to committees, with each group locating, gathering, and posting local information. Some of the first information presented on NeighborhoodLink was related to vital statistics (e.g., how to obtain a birth or death certificate from City Hall). This type of city information was expected from the City of Cleveland, but the city's scant resources limited volunteer time and resulted in limited participation from the city.

Moving on, the committee decided that although government and city information had been an early priority for a content area, it was not the only one. Six other content areas were quickly decided on: education, employment, health care, housing, informational resources, and family services. Subcommittees of volunteers with expertise in these subjects were set up for each content area, and the chairpersons of these subcommittees were designated as the Steering Committee, which has responsibility for decisions on future support, content development, expansion of sites, and maintenance of hardware and Web sites.

Assigning a group or committee of volunteers shared responsibility for finding and entering content may be a good way to develop content, but the process is difficult if volunteers do not have clearly defined tasks. The quality of content in community networks is directly related to the amount of time spent on compiling local data and information, organizing that information, and locating new useful links. The content needs to be enhanced, reviewed, and updated, with relevant and important information continually being added.

Content development is time-consuming for volunteers, but the task is simplified when an online model fits the needs of the community and volunteers have solid ideas for content in each subject area.

Content for Inner-City Users

NeighborhoodLink is trying to gather and provide content that is useful to and of specific interest to a low-income, inner-city audience, but not without the usual content of a more general community network. And because a significant portion of the area's inner-city residents read at the seventh-grade reading level, a reasonable amount of material needs to be written at about that level, with a layout designed to provide easy access to information. Although some of the fun of "surfing the net" is finding unexpected treasures of information, disorganized data frustrate users who do not have the time or experience to distinguish the useful information from the worthless.

The specific kind of Internet information that benefits low-income families and children would most likely not have any commercial value. Nonprofit organizations and community networks would be the providers interested in supplying most social service and education information for low-income users. For instance, helping people find GED or parenting classes would be of more interest to nonprofit, social service agencies than to a commercial enterprise. NeighborhoodLink partners believe that this specific kind of content would be useful for community networks serving low-income users or clientele. There are, however, several other models that can be discovered by searching other community networks.

Strategic Planning and Decision Making

Who decides what the inner-city community needs? How do we know we are providing beneficial information and services? NeighborhoodLink has tried to answer these questions by recruiting representatives from over 90 local organizations or local branches of national groups—the Cleveland Public Library, the Urban League, the National Aeronautics and Space Administration (NASA), the local Public Broadcasting System (PBS) affiliate, foundations, city representatives, social agencies, schools, technical centers, and local colleges.

To determine that the information we provide is beneficial, the NeighborhoodLink project has encouraged feedback from the end users. Staff at the NeighborhoodLink sites talk with local residents as they train them and discuss their information needs. Understanding what the users want and need is only half the work, however. It is also necessary to understand and educate users about what community networks can provide for them—beginning users are not aware of all the possibilities until they have experienced some of the potential of the Internet.

Community Networks Unlimited

Community networks have often been discussed collectively because they appear to have similar community-related goals and local audience, but a more formal definition of the term helps to recognize that there are a variety of community networks. The following definition was developed by the Chicago Coalition for Information Access:

> A community network is a computer-based electronic network that provides a wide range of public and community-based information and services to people in a community for little or no cost. Although not a requirement, these systems are generally administered by nonprofit groups or governmental agencies. Attention is paid to providing access to people who traditionally have little or no access to electronic information and services. Generally community networks are activist-oriented, and have been established primarily to meet social needs rather than financial goals. Outreach to and feedback from the community are vital to the system, offering a participatory medium, utilizing the principle of many-to-many communications. (Chicago Coalition for Information Access, 1996)

This definition identifies several of the community network elements that make a difference—service, content, audience, cost, orientation, goals, methods of outreach, and feedback—and shows just how broad a range is covered by the term *community network.*

Beamish (1995), in an attempt to classify this broad variety of community networks into more specific categories, identified four: FreeNets, bulletin boards, government-sponsored networks, and wired cities. The list is obviously just a beginning and, as such, is incomplete; clearly, a community network such as NeighborhoodLink does not fit into any of those categories. In another attempt to narrow down the variety of networks that are

generalized under the too-broad term of community networks, Kanfer and Kolar (1995) suggest the term *citylinks* for urban networks, but this term can easily be confused with commercial city sites. I would like to suggest the term *urban community network* as perhaps a more precise term for an inner-city community network such as NeighborhoodLink, a term that would provide an identity that is distinct and identifiable.

Access Unlimited

Community networks have a variety of models that try to overcome the physical barriers to access. Programs such as the Diversified Information and Assistance Network (DIANE) Project at Tennessee State University focus on the teleconferencing potential of networks to overcome those barriers, providing experiences such as special field trips for its isolated rural population. Other projects focus on delivery of the computers to the school setting or community such as the *CyberEd* project in which a 120-foot, 18-wheel trailer-truck, packed with six computer stations and a large monitor for group sessions and videoconferences, visits low-income areas around New York City and Baltimore.

Another program, *Technology 21*, connects public schools in Chicago, New York City, Pittsburgh, and San Francisco through Web sites and videoconferences "so that educators can share their experiences and students can learn from other institutions" ("Roving 18-Wheeler," 1996, p. A21). The Stockyards Neighborhood project in Cleveland provides renovated computers for low-income families, while the Blacksburg Electronic Village provides computers and a community network (see http://www.bev.org) for everyone in the small town.

More conservative studies suggest after-school recreation centers as locations that are accessible for computer activities for low-income youth (Children's Partnership, 1994). This path is, in fact, the one that NeighborhoodLink has taken, with Neighborhood Centers Association placing computers in community settlement houses and recreation centers. Recently, a new city-sponsored program is placing more computers in the city's recreation centers, agreeing that these locations have been working well for Cleveland's inner-city population. The decision to use the recreation centers and other community centers is satisfactory to those who work on the NeighborhoodLink project.

NeighborhoodLink: Content Limited

NeighborhoodLink content has been limited thus far to those areas that the local community would find useful and relevant, but at the same time, it has been designed to offer the user a variety of links and original data. Some choices take users directly to a local site such as "Teaching Cleveland," which provides historical text and graphics about the city. Another page links the user to large content areas such as Ameritech's Schoolhouse Server, which can introduce beginning users to a vast array of educational links. And, of course, NeighborhoodLink has a link to the Cleveland Public Library, as every community network does to its local library. A very popular link takes the user to the Regional Transit Authority (RTA) Web site, which gives information about bus timetables, route maps, and job listings.

Several local sites were chosen and linked in the area of education: Empire Computech Center, the computer magnet school in Cleveland where second- and fourth-graders produce computer projects online; the K–12 home page developed by Cleveland's NASA Lewis Research Center, which provides math and science projects for teachers and students; a sample math proficiency test for ninth-graders; Project Act, a local homeless children and youth program; State of Ohio information, including a link to *Ohio SchoolNet*, which provides information about state initiatives to provide technology networks and computers for public schools; and *Ohio Education Management Information System (EMIS)*, which provides extensive and detailed statistical information about Ohio's school districts. Having a good, but small, collection of local information pieces, NeighborhoodLink is striving to expand and improve content to compare favorably with the best models, motivating both volunteers and users in their separate tasks.

Models of Content

A search for models of content was initiated using several lists of community networks found online, including a list compiled by Beamish (1995); an annotated Web site of NTIA-sponsored projects as models (U.S. Department of Commerce, 1996); a community computer network survey compiled by Doug Schuler of the Seattle Community Network (Schuler, 1994); and a 1996 review of community networks compiled by Kim Gregson of Indiana

University (Gregson, 1996). To improve the content in NeighborhoodLink for low-income families and children, I reviewed over 20 of these community networks (see the Appendix) and chose the following models as being potentially helpful for NeighborhoodLink.

Philadelphia/LibertyNet

LibertyNet states as its goal: "to be the leading online publisher of information about the Philadelphia region by providing a voice for the community; to provide resources and direction to help the region's non-profit organizations use the Internet to meet their goals; and, to bridge the gap between underserved groups and technology by supporting neighborhood Internet access centers." The founders of this site seem to come down on the side of the nonprofit agency rather than the individual, as a way to "empower community members . . . [by providing] them with the necessary technical support, education and training" (see http://www.libertynet.org:80/ln/about). In spite of this somewhat different slant, NeighborhoodLink can still find a significant model in this community network because it has a strong focus on information for the entire community, including the inner city.

The main home page for education on LibertyNet has extensive information and links to data on the local school district and the primary Philadelphia libraries. Similar to NeighborhoodLink, other headings include colleges and universities, K–12 public schools, K–12 private schools, libraries, adult education, and education-related organizations. The vast number of links in each category, however, surpass NeighborhoodLink's and make it impossible to list them here. A few representative sections are summarized—Adult Education and Neighborhoods Online—as examples of relevant content for urban community networks.

The Adult Education section includes information on graduate school housing, centers for fine arts and ethnic studies, college libraries, magazines with local resources for parents, a literacy center, Hispanic agencies and organizations, community colleges, churches, art schools, a computer and graphics training center, historic sites and organizations, the YMCA, a writing site, TV sites, and a Workforce 2000 training program site. The selections are a mix of links and original data that would be useful for any community network, along with some that are especially good for urban community networks (e.g., the literacy center).

Neighborhoods Online has content aimed at activists, researchers, and policy makers with a higher reading level, and it contains links to sites on a variety of topics, including national education goals; White House releases on education; education listservs; ERIC's Urban Education web; libraries; discovery learning sites; historically black colleges; advocacy groups, including the PTA, National Education Association, American Federation of Teachers, and literacy sites; parenting and youth-related sites; the Children's Defense Fund; Kids Campaign; state and federal education sites with information about Goals 2000; Department of Health and Human Services information including Head Start; and Senate and House Committee information related to education.

Charlotte, NC/Charlotte's Web

Charlotte's Web is a community network that has received some NTIA funds and aims "to help people use telecommunications technology to improve their lives and foster civic involvement" (U.S. Department of Commerce, 1996). Charlotte's Web serves 14 counties with "access, content, training and support in electronic communication." They "provide a range of free services and also provide 'wide-area' intranet and various Internet and networking services to nonprofits and small governments on a fee-for-service basis" (see http://www.charweb.org/webinfo/about.html).

The Charlotte's Web home page, although not specifically targeted toward the low-income, inner-city audience, has several pages that would be of interest to that group, including some devoted to jobs, health and human services, neighbors and communities, and education.

To show Charlotte's Web's usefulness as a model, the education content is comprised of sections on public and private schools, with information about school board candidates; a community guide to the school budget; a register of public schools; a list of local, independent, and neighboring schools and districts; colleges and universities with financial aid sites not found elsewhere; libraries, museums, and local history sites; federal government and education sites; information for students, teachers, and parents (e.g., an exceptionally good list of homework helpers, online magazines, and parenting sections); magazines, journals, and reports indexes (e.g., CARL and ERIC); and general references (e.g., dictionaries and statistics). Another valuable

section on Charlotte's Web called E-Lit (Electronic Literacy Project) includes GED practice study material that would be useful for an inner-city network.

Although replicating some of this information would require a significant outlay of time and effort (e.g., the local school information), others would require simple links; Charlotte's Web is a significant model that would keep any volunteer working on content busy for some time to come.

Cities/Community Sites: Boulder Community Network (BCN) and SmartCities

Two small city sites often recommended as community network models are the Boulder Community Network (BCN) from Boulder, Colorado, and SmartCities from Kansas City, Missouri. The Education Center of the BCN is organized under the following headings: general interest and continuing education, regional K–12 Schools, day care centers, K–12 educational forum, K–12 extracurricular activity ideas, colleges and universities, other Boulder area educational resources, and national and global resources. This site is rather small at present, but it supports the notion that a site may be better if limited and well-defined rather than attempting to meet every need a community has and losing its special identity in the process (see http://bcn.boulder.co.us).

SmartCities is a regional development group aimed at attracting business and creating jobs in the Kansas City area. It was developed by a coalition of public and private organizations with a mission to "modernize the information infrastructure . . . of the area to enhance the region's reputation as a leading edge area for doing business electronically" (http://www.smartkc.com). This commercial slant separates SmartCities from most of the sites examined, but it may be a link to employment information that Web sites on community networks would like to have.

Special Programs: Plugged In and Inner-City Net

Plugged In describes itself as a "non-profit organization established in 1992, [which] helps bridge the gap [between Silicon Valley and neighboring East Palo Alto] by bringing the benefits of computer and communications technologies to the entire community." Their mission has been to help "provide East Palo Alto organizations and families with access to computer technology, serving as a nationally recognized model for connecting low-income communities with the information economy. Community members of all ages use state-of-the-art computers to do online research, work on resumes, complete homework assignments, or participate in one of 30 classes offered in partnership with local agencies" (http://www.pluggedin.org/info/overview.html). The site has changed in the last 2 years; earlier versions emphasized online experimental projects and were directed more at the K–12 population. It now seems to appeal more to the high school to adult audience, with computer-related employment as a main goal for its users.

An interesting site for those who wish to target the inner-city population is the Inner-City Net, a work in progress like so many other Web sites. According to their online history, the "Inner-City Net was created by the Metropolitan Area Advisory Committee (MAAC Project), a community-based nonprofit organization in San Diego County. The seed funding provided by TIIAP has been matched, to date, by support from Pacific Bell, MAAC, Girard Foundation and Parker Foundation." Their objectives are to provide Internet access, training, and content to some of the poorest neighborhoods in San Diego (see http://www.innercitynet.org).

Inner-City Net is a collaboration of six community organizations, each with a specific ethnic focus: Latino, African-American, Pan-Asian, or Native American. Inner-City Net is unusual in its focus on multiculturalism and in its approach to online Internet training. This model, like NeighborhoodLink, began with the problem of access, followed by training, and finally a search for content suited to the target population. The main content areas currently are entry-level local jobs, updates on community resources, services provided by local agencies, family and health care information, and discussion forums.

Conclusion: In Searching for a Model, We Find Ourselves

Reviewing models of a variety of community networks reveals characteristics of sites that are not obvious at first glance. Several models that had looked promising were eliminated from consideration when I realized how dissimilar their audience and needs were from those of NeighborhoodLink. In the end, LibertyNet and Charlotte's Web proved to be the two most appropriate models to provide NeighborhoodLink

with ideas for local information that can be adapted and replicated, but several other models have also provided information and potential links.

Reviewing models can also have unexpected benefits. As I scanned numerous models, I came to recognize the accomplishments of NeighborhoodLink that are exceptional. For example, the section on Cleveland Information supplies not only census statistics on the city's neighborhoods but also histories not available anywhere else, and the graphic history of Cleveland designed as a teacher's lesson plan is packed with data and photos that are an educational resource for any community user.

My study suggests that the process of replicating a model network is greatly enhanced for community networks when there is a clear understanding of the community's specific needs and audience. Any network provides better service for its users if it knows its place in the greater world of the Internet. Although all community networks require much of the same basic information and services, each network needs to find its own niche to provide relevant and important content in an organizational structure that works. It is becoming increasingly clear that the only way we will be able to manage the large and growing body of educational resources on the Internet is to focus on those that are of high quality and effective for their audience.

References

Beamish, Anne. (1995). *Communities on-line: Community-based computer networks.* Master's thesis, Massachusetts Institute of Technology. [Online]. Available: http://sap.mit.edu/arch/4.207/anneb/thesis/toc.html [1997, August 21].

Chicago Coalition for Information Access. (1996). *What is a community network?* [Online]. Available: http://cs-www.uchicago.edu:80/pub/discussions/cpsr/ccia/ccia-net.html [1997, September 4].

Children's Partnership. (1994). *America's children and the information superhighway.* Santa Monica, CA: Author.

Children's Partnership. (1996). *America's children and the information superhighway: An update.* Santa Monica, CA: Author.

Colleges ponder pros and cons. (1997, August 1). *Chronicle of Higher Education*, p. A22.

Gregson, Kim. (1996). *Review of existing community networks* [Online]. Available: http://php.ucs.indiana.edu./~kgregson/commnet_site_review.html#annotated [1997, September 4].

Inner-city access. (1995, May 12). *Chronicle of Higher Education*, p. A23.

Kanfer, Alaina, & Kolar, Christopher. (1995, December). *What are communities doing online?* Paper presented at Supercomputing '95, San Diego, CA [Online]. Available: http://www.ncsa.uiuc.edu/People/alaina/com_online [1997, September 4].

Morino, Mario. (1997a). *About Morino Institute.* [Online]. Available: http://www.morino.org/about.people.mario.html [1997, September 21].

Morino, Mario. (1997b). *Assessment and evolution of community networking* [Online]. Available: http://www.morino.org/publications/assessment.html [1997, August 25].

Roving 18-wheeler brings the Internet to low-income areas. (1996, July 19). *Chronicle of Higher Education*, p. A21.

Schuler, Doug. (1994). *Community computer network surveys* [Online]. Available: http://www.cs.washing.edu/research/community-networks [1997, September 4].

U.S. Department of Commerce. National Telecommunications and Information Administration. (1996). *Sample of proposals supported by grants from NTIA* [Online]. Available: http://www.ntia.doc.gov [1997, August 28].

APPENDIX

Model Networks Examined

Alachua Freenet
http://www.afn.org/

Aurora Online Community Network
http://www.aocn.aurora.edu/

Big Sky
http://macsky.bigsky.dillon.mt.us/

Blacksburg Electronic Village
http://www.bev.net/

Boulder Community Network
http://bcn.boulder.co.us/

Charlotte's Web
http://www.charweb.org/

Chicago
http://www.ci.chi.il.us/

Chicago Community Information Consortium
http://www.cnt.org/ccic.html

City Nets

Philadelphia
http://city.net/countries/united_states/pennsylvania/philadelphia/

Detroit
http://www.city.net/countries/united_states/michigan/detroit/

Civic Network
http://www.civic.net:2401/

Cleveland Live
http://www.cleveland.com/

Detroit Freenet
http://detroit.freenet.org/

Freenet list
http://www.netlab.co.uk/freenet/

Inner-City Net
http://www.innercitynet.org/

LibertyNet
http://libertynet.org:80/

Metroscopes

Philadelphia
http://metroscope.com/philly.html

Detroit
http://metroscope.com/detroit.html

Ohio Dept. of Commerce
http://www.ohiobiz.com/

Plugged In
http://www.pluggedin.org/

Prairie Net
http://www.prairienet.org/

Silicon Valley-Public Access Link
http://www.svpal.org/

SmartCities (Kansas City Area)
http://www.smartkc.com/

Suncoast Free-Net
http://scfn.thpl.lib.fl.us/

University System of Georgia
http://www.PeachNet.EDU/

■